



The GSFC Science Flight Planning Tool

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Who is it for?

Scientists:

- Communicating w/ pilots
- Exploring realistic scenarios
- Planning over different time scales

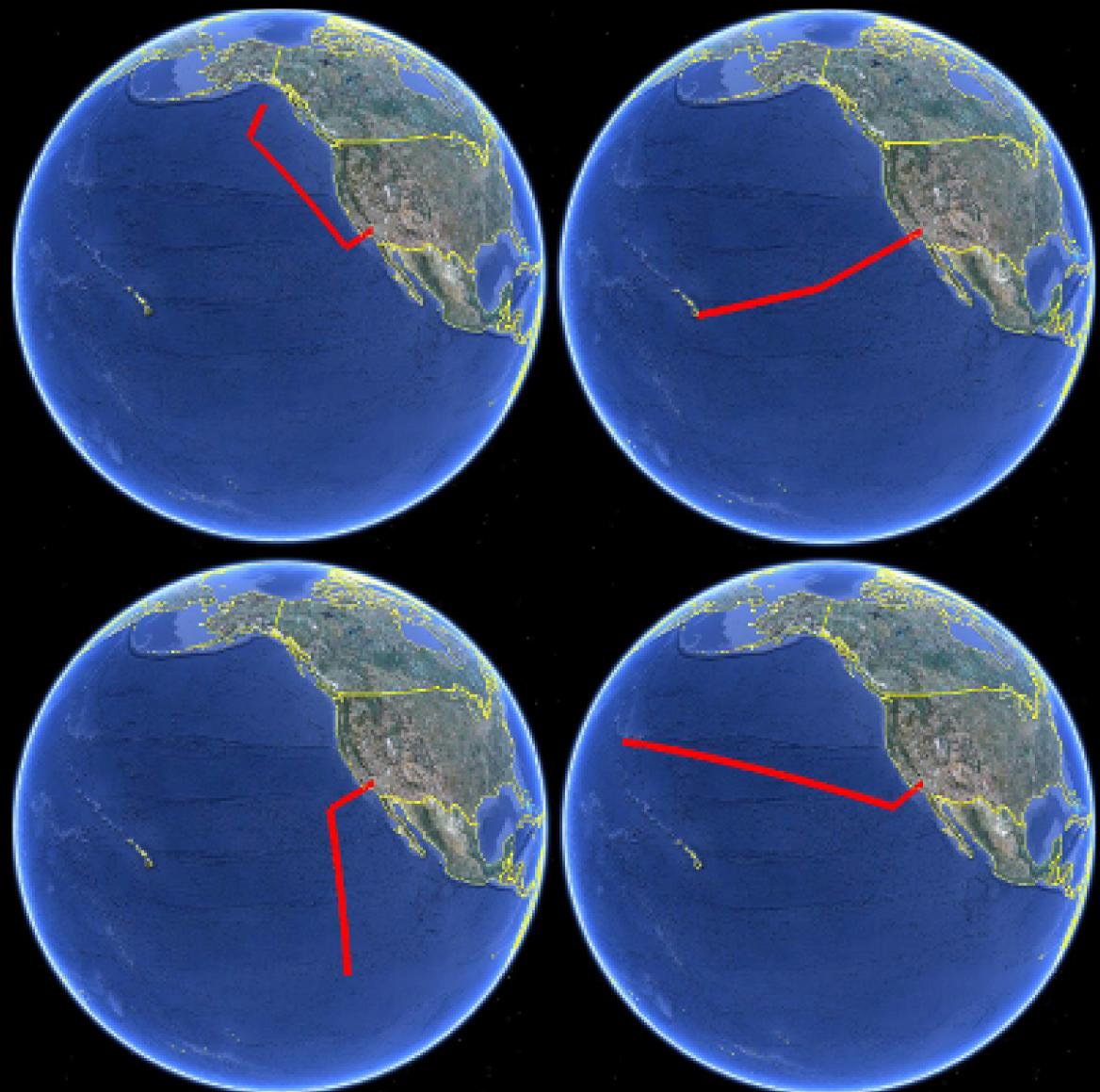
Communicating:

Flight Crew &
Scientists
seem to live
in two different
worlds



Exploring:

Compare
tradeoffs
of diff.
flight
scenarios



**Real-Time
In-flight**

**Short-term
Planning**

**Long-term
Planning**

Sat Imagery

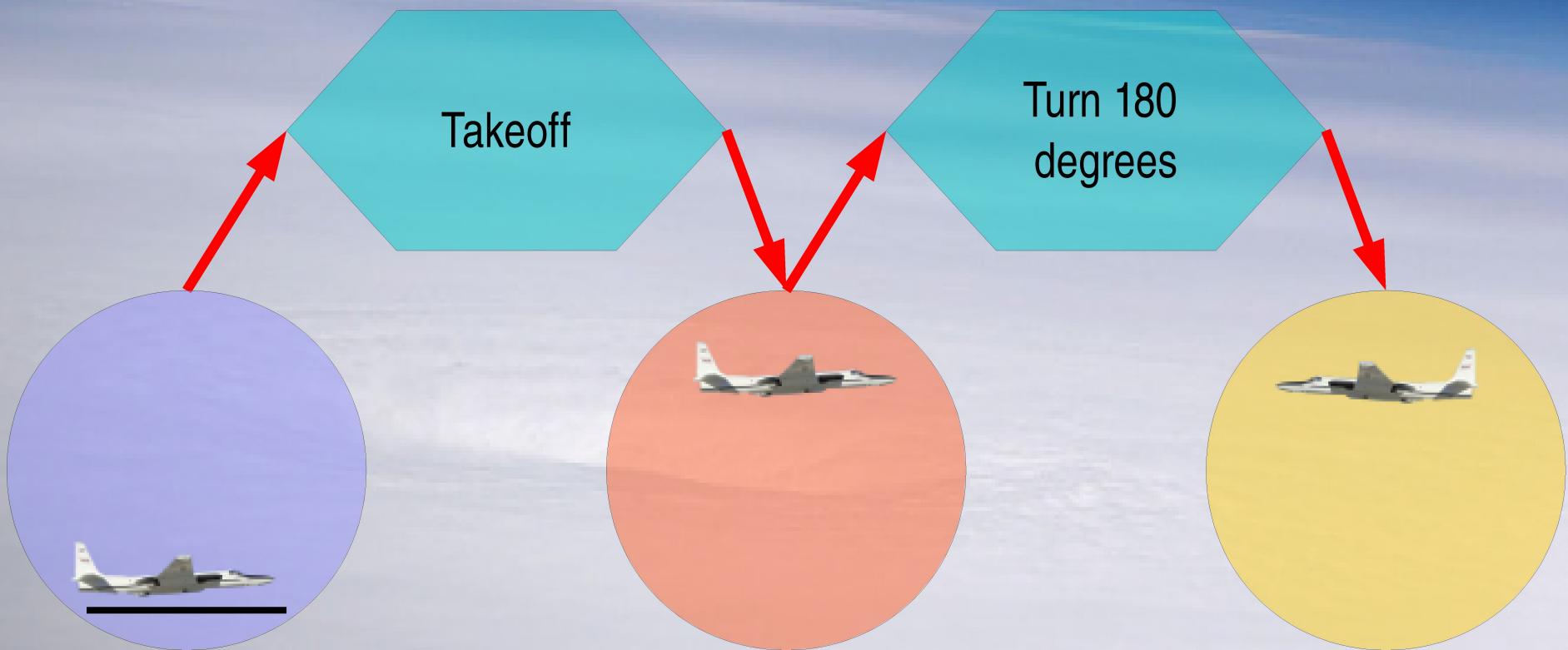
Met Forecasts

Climatologies

What sets it apart?

- Flight plan = sequence of maneuvers
- Versatile data displays
- Versatile output

A flight plan is a sequence
of maneuvers that change an
aircraft's state



Data displays:

- Many kinds of plots
- All plots made on demand
- Data from local files (for now)



Absence of options
Is bad



Variety and choice
are good

Graphical Output Formats: Sometimes, we want to insert plots into other documents

**Text/Tabular Data:
Sometimes, we want
numbers, not plots**



How can you get and
run the flight planner
software?

Prerequisites:

- Need Mac or Linux
- Need IDL (pref. v. 8.1)
- (optional) external drive
- (or a login acct on our system,
with SSH and X11 on your
personal machine)

URL:

**[http://acdb-ext.gsfc.nasa.gov/
People/Lait/Missions/flight_planner/](http://acdb-ext.gsfc.nasa.gov/People/Lait/Missions/flight_planner/)**

- Read the README file
- Download flightplan.tar.gz

Global Hawk module:

- NGC has asked not to be widely distributed
- Limited to project scientists, met support, etc.
- Send request to
Leslie.R.Lait@nasa.gov

Tutorial videos:

- Download from URL
- Series of topics
- Quicktime movies



The path ahead?

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